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(71)(72) Applicant and Inventor: LILJERYD, Lars, Gustaf [SE/SE]; Vintervagen 19, S-171 34 Solna (SE).
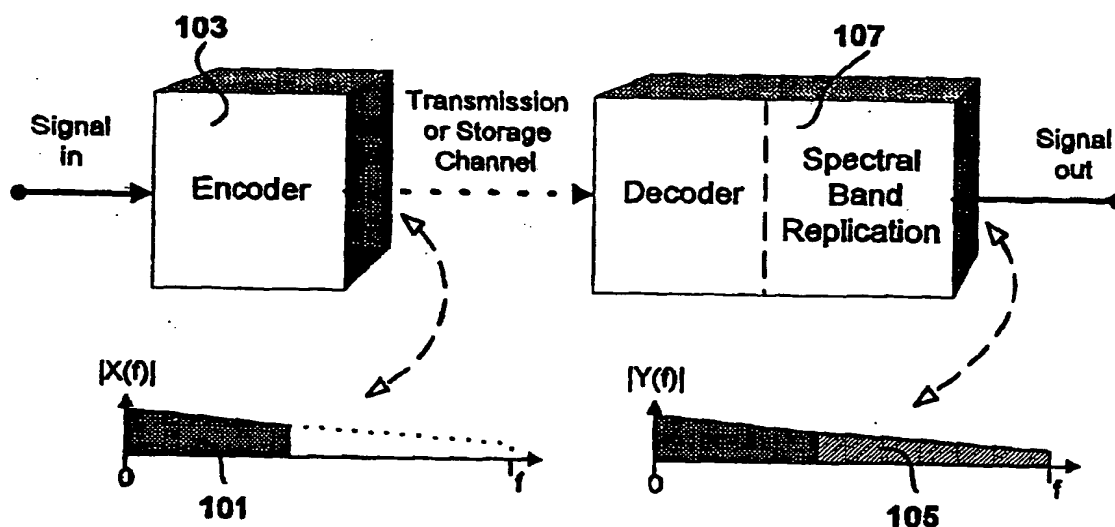
(72) Inventors; and
(75) Inventors/Applicants (for US only): EKSTRAND, Per, Rune, Albin [SE/SE]; Renstiernas Gata 29, S-116 31 Stockholm (SE). HENN, Lars, Fredrik [CH/SE]; Ritarvagen 14, S-168 31 Bromma (SE). KJÖRLING, Hans, Magnus, Kristofer [SE/SE]; Vindhemsgatan 19C, S-752 27 Uppsala (SE).

(74) Common Representative: LILJERYD, Lars, Gustaf; Vintervagen 19, S-171 34 Solna (SE).

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(54) Title: SOURCE CODING ENHANCEMENT USING SPECTRAL-BAND REPLICATION

(57) Abstract

The present invention proposes a new method and apparatus for the enhancement of source coding systems. The invention employs bandwidth reduction (101) prior to or in the encoder (103), followed by spectral-band replication (105) at the decoder (107). This is accomplished by the use of new transposition methods, in combination with spectral envelope adjustments. Reduced bitrate at a given perceptual quality or an improved perceptual quality at a given bitrate is offered. The invention is preferably integrated in a hardware or software codec, but can also be implemented as a separate processor in combination with a codec. The invention offers substantial improvements practically independent of codec type and technological progress.